

Feedback Form

Small Hydro Program Workshop, May 19, 2022

Feedback Provided by:

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Date: June 2, 2022

To promote transparency, feedback submitted will be posted on the IESO webpage unless otherwise requested by the sender.

Following the (Thursday, May 19, 2022) Small Hydro Program Design Outreach Session, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the following discussed items. Background information related to these feedback requests can be found in the presentation, which can be accessed from the [engagement web page](#).

Please submit feedback to engagement@ieso.ca by Thursday, June 2nd. To promote transparency, feedback provided will be posted on the engagement webpage.

Small Hydro Program – Capacity Payments

	Topic	Feedback
1.1	What feedback do you have on the payment structure as it relates to a capacity payment plus an energy payment with a floor and a ceiling?	The proposed structure has the potential to add significant complexity for the generator and the Program administrator. The IESO has recognized that the vast majority of the facilities have little operational flexibility due to water management limitations. Most of these facilities, purpose-built decades ago, were specifically designed to optimize the production of energy over an annual hydrologic cycle. Bundled energy contracts remain the simplest structure for these facilities. The proposed Program design and pricing should be relatively equitable across the fleet of facilities.
1.2	What feedback do you have on the assumptions for the reference case used in developing the payment structure? Specifically, what feedback do have on the reference case regarding: an appropriate split between the capacity payment revenue verses the energy payment revenue; the assumed capacity factor; the energy floor price?	The proposed structure appears to disproportionately penalize high capacity factor facilities (i.e. many run of the river hydros) which were, again, built site specifically decades prior to the introduction of the market in Ontario. To address this, rather than using nameplate as the basis for the calculation, it is suggested that a facility's actual seasonal capacity factor, as derived over a significant time period of energy production (5-10 years) be used as the basis for the derivation of the capacity portion of the revenue stream. Both the energy floor price (\$20) and ceiling (\$45) seem appropriate, applied to generation on a monthly basis and adjusted over time for inflation. The relative split between capacity and energy revenues (70%/30%) using the energy floor price as the basis for the calculation seems appropriate.
1.3	What feedback to you have regarding setting the fleet wide capacity factor benchmark at 40%? (Below this capacity factor, capacity payments will be reduced)	It remains unclear whether this is proposed as an annual benchmark (i.e. determined based on annual production). The OWA recommends that the Reference Capacity Factor (RCF) be applied on an annual basis. Hydrology and corresponding plant Capacity Factors can vary +/-30% in any given year for a run of the river plant in Ontario. If the intent is not to penalize plants for poor hydrology, then the annual RCF should be 25% to 30%, to provide a bandwidth on the base line case.

	Topic	Feedback
1.4	What feedback do you have regarding the energy ceiling concept and price?	The concept has merit within the proposed framework. Generation against the floor and ceiling prices should be assessed on a monthly basis and the floor and ceiling should be adjusted to CPI annually.
1.5	What feedback do you have regarding an appropriate percentage of the capacity factor for which an escalation factor (Ontario all-items CPI) should apply? What is the justification for the percentage you are recommending?	Both the capacity payment and the energy floor and ceiling should be 100% indexed to the Consumer Price Index, as is the case with existing contracts to support the required sustaining capital investments for these perpetual assets. While capex is "lumpy" over the life of a contract, in general it will be spread out over the time period, so full inflation is justified. There may be some plants that need a major capital outlay early in the new contract, but so too will there be plants that have invested significant capital before the new contract and will be forecasting heavy capex later in the new contract term.

Small Hydro Program – Dispatchability

	Topic	Feedback
2.1	What feedback do you have on the approach to enhance payment for dispatchable facilities (increase capacity payment by X%, increase	Dispatchable generators should have the option to determine which approaches are best suited to individual facilities. Each of these approaches has merit and should not be considered mutually exclusive. A combination of the three approaches could prove most effective.

	Topic	Feedback
	ceiling price or revenue share above ceiling price)? In your response, please note if you are a dispatchable facility / intent to become one as this design feature may only impact a very small portion of facilities.	

Small Hydro Program – Tranching

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3.1	What feedback do you have regarding the recognition of economies of scale by providing an adjustment to the capacity payment of facilities under 1MW? What feedback do you have regarding an appropriate adder (in terms of a % of the capacity payment)?	The OWA supports the recognition of economies of scale by providing an adjustment to the capacity payment of facilities under 1MW and recommends a 10% adder to the total revenue to support sustaining capital investment. The smaller facilities are subject to the same legislative, regulatory and policy requirements as all other facilities (environmental, public safety, water management) and therefore bear a disproportionate financial burden.

Small Hydro Program – Contract Length

	Topic	Feedback
4.1	What feedback do you have regarding the option to terminate existing contracts and sign into the program at any time, with all contracts ending 20 years from program opening (ie. May 2043), regardless of when a contract is signed?	The OWA supports this concept but recommends that there be a third option – that a current facility owner is permitted to sign a new contract at any time for the period between the expiry of the existing contract and May 2043. This is particularly relevant for facility owners who have recently invested in expansions under the provisions of their existing contracts and require the current revenues to support that previous investment.

Small Hydro Program – Community, Conservation Authority & Indigenous Ownership

	Topic	Feedback
5.1	What feedback do you have on a minimum Indigenous, Conservation Authority or Community ownership stake to qualify for an enhanced payment?	The OWA recommends that enhanced payment eligibility for Indigenous participation begin at a 10% equity ownership level and be scaled up to 50%. Evidence from current projects indicates that many Indigenous communities begin with a minority position in a facility and that the revenue streams often support broader community objectives, including in some cases the increase in the ownership stake. The enhanced payment eligibility for CA or Municipal ownership should begin at 20% and scaled up to 50%. Conservation Authorities are funded primarily by municipalities and, like the municipally owned infrastructure, play an integral role in water management. These locally owned and operated facilities provide community benefits that extend well beyond the production of electricity including public safety, recreation, tourism, economic development, local employment and environmental benefits.

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5.2	What feedback do you have on the maximum value of an adder (in the case of 100% ownership by an Indigenous Community, Community or Conservation Authority)?	As noted above, there should be a sliding scale applied to the adder based on the level of ownership, consistent with previous approaches. Under those initiatives, the maximum value of community equity participation was approximately 10% (1.5 cents per kwh). The maximum under this Program should be similar.

General Comments/Feedback

	Topic	Feedback
6.1	Please provide any additional comments or feedback that would assist in the design, development and implementation of a Small Hydro Program	As noted above, there is a need to explicitly address those facilities which already invested in expansions under the existing contract within either the revenue streams proposed or through a forward period for the new contract that is consistent with the period remaining on the existing contract. These investments cannot be recovered by migrating to a new generic contract prior to current contract expiration and the risk of not receiving a follow on contract (i.e. should the Program be cancelled in the future) will deter future investment. In addition, there should be some discussion on the ownership of environmental attributes, particularly given the IESO's work on recommendations design of a Clean Energy Credit Registry. Some reasonable sharing of credits between the IESO and the generator would be appropriate, particularly with new expansions. Finally, the IESO is currently proposing to settle existing contracts on the Ontario

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	Zonal Price (rather than the locational marginal price) post market renewal. This approach should be brought forward for consideration in detailed Program design.